

**DEVICE FOR EASY AND FAST ARRANGMENT OF ORNAMENTS IN THE
HAIR, ADAPTED ORNAMENTS AND CORRESPONDING METHOD**

Technical Field

The invention relates in general to the field of costume jewelry, fine jewelry, jewelry-making, perfumery and ornaments for animals, and is applicable to these areas as well as to wig-making and hairstyling techniques.

5 **Prior Art**

US Patent 4,315,362, WO Patent 96/24624 and FR Patent 98/08142, which for certain describe a hairstyling system (for making braids) that requires multiple operations and that comprises a fine metal loop into which a lock of hair is passed for decorative purposes. These patents describe techniques that are complicated, and/or
10 that do not truly make it possible to attach the hair, and/or that are complicated to use for an uninformed user.

Therefore, there exists a real need for a system that is simple, inexpensive and easy to use, even for an uninformed user, and that is strong.

15 **Summary of the Invention**

The present invention relates to a device 1 for putting ornamental elements in the hair, comprising a fine loop 2 that is crimped or otherwise secured at one end 4, and that is designed to cooperate with an ornament 7, itself comprising a support 8 designed to be fastenable onto or around the loop 2, and at least one hair ornament 9
20 integral with said support.

It is understood by "fastened onto or around the loop 2" that said support 8 consists of a body comprising a means making it possible to pinch said support onto the branches of the loop 2, in order to fit tightly around the latter, or an internal channel open at both ends, enabling said support to be threaded onto said branches of
25 the loop 2, and the like, which will be obvious to those skilled in the art, the means in

question being customized in a manner accessible to those skilled in the art, such as needing to enable positioning of the support (bearing the ornament) on the loop 2, and then to sliding it along said loop, as will be described below.

5 The invention will be better understood upon reading the non-limiting examples below, and the likewise non-limiting description, while referring to the appended drawing in which:

- Figure 1 shows a perspective view of a device 1 according to the invention, over which device is threaded, for non-limiting illustrative purposes, an ornament consisting of a support 8 threaded onto the loop 10, 11 and an actual ornament 9 glued
10 or otherwise fastened to the top of said support 8;

- Figure 2 shows the invention in modular form: A represents the crimping module 6, B represents the "loop" module (2, 10, 11) with tip 3, C represents an "ornament" module consisting of a support 8 designed to be threaded onto the loop module B, and onto which the actual ornament 9 is fastened;

15 - Figure 3 shows a non-limiting example of the ornament 9, bearing a resemblance to a diamond cut;

- Figure 4 shows a preferred example of a support for said ornament 9, designed to be threaded onto the loop (as shown in Figure 1) owing to a channel 13;

20 - Figure 5 shows a front view of a crimping mode [sic; module] having an overall oblate shape, consisting of two sheets of aluminum or plastic 14 and 15 glued together, forming a channel 12 for crimping the end of the rods 10 and 11 of the loop (it might be possible to provide two adjacent channels 12 and 12' each for crimping one rod 10 and 11, respectively);

25 - Figure 6 is a [cross-]sectional view showing the crimp in area 13 (see Figure 1 or 7) with two adjacent channels 12 and 12' each receiving one rod 10 or 11, respectively;

- Figure 7 shows a side view of the device according to the invention.

Invention

The device 1 thus comprises essentially one loop 2, preferably pointed at one end 3 and crimped at the other end 4 by a crimp 6.

5 This crimp 6 is a mass having an overall oblate shape, which surrounds the two free ends 4 of the loop, e.g., a mass of resin or other plastic material heat-shrunk around the ends, or a mass of glue deposited around said ends, by depositing, dipping, etc., or else a plastic mass that has been slit open over approximately $\frac{3}{4}$ of its diameter, and inside of which slit the ends of the loop are inserted prior to pinching or crimping the assembly together. This crimp can also be made with a mass of resin or
10 other plastic material comprising a coaxial channel into which the two ends of said loop 2 are introduced, prior to pinching or crimping the assembly together, or else prior to gluing the assembly together. Any material non-toxic to humans can be used for the crimp, such as various plastic materials, resins, metal, wood or fabric.

A shape (6) of the type shown in perspective in Figure 1, and in a side view in
15 Figure 7, is designated throughout the text including the claims as an "overall oblate shape," i.e., an oblate shape capable of being viewed from above as round or oval or even rectangular or square in shape. The substantially round or oval shape described in Figure 1 or 2 is preferred. The thickness is variable, and non-limiting examples will be provided below.

20 It is quite obvious that, from this description, those skilled in the art will know how to adapt the shapes and dimensions without difficulty. The invention covers these adaptations.

To date, the best mode of carrying out the crimping operation is with a crimp made of aluminum or plastic.

25 Most preferably, it consists (Figure 5) of two aluminum or plastic plates, an upper one 14 and lower one 15, inside of which at least one channel 12 is formed for containing the end of the steel rod (or loop 10, 11).

Between the two aluminum or plastic plates for receiving the rods 10 and 11, respectively, two side-by-side channels 12 and 12' may possibly be formed

(alternative shown in Figure 6, which, for non-limiting purposes, shows a crimp area at the start of the crimp – area referenced as 13 in Figure 1 or Figure 7).

Typically, and for non-limiting purposes, the dimensions are on the order of:

- a = 1.5 to 3 mm, preferably 2 mm
- 5 b = 20 to 40 mm, preferably 30 mm
- c = 50 to 70 mm, preferably 60 mm
- d = 3 to 5 mm, preferably 4 mm, the channels preferably being at a distance of approximately 1 mm from the edges.

Next, these two plates are glued or are fastened in some other manner. Gluing
10 is very clearly preferred because it is simple and effective.

In the best embodiment, the aluminum or plastic has been machined such that the steel rod is easily housed therein (inside a provided cavity in the shape of an inverted T), and the entire unit has been embedded in the glue.

Materials such as [the following] can be considered for the crimping operation
15 (in order): plastic, metal, aluminum, glass, wood, fabric, leather, and, more generally, any type of material.

The loop 2 may consist of two branches 10, 11, which are free at their ends 4 and joined together at the ends 3, or else said loop may be a loop whose ends 4 are already joined together like the opposite end 3.

Those skilled in the art will have understood that, in this case, a "loop"
20 designates an assembly consisting of two branches 10, 11 joined together at one (3) or [both of] their ends (3 and 4), as just stated, and forming a very elongated oval, as shown in Figure 7.

Preferably, the end 3 is pointed or angular, in order to facilitate arrangement of
25 the support 8.

The loop 2 is designed to cooperate with ornaments 7 consisting substantially of a support 8 designed to be threaded or otherwise pinched or arranged (as indicated above) onto or around said loop 2; and [consisting] of the ornament itself 9, which is integral with said support.

Said support 8 is threaded onto said loop 2, a lock of hair is passed into said loop, the support 8 holding the ornament 9 is transferred (by sliding it along said loop 2), onto said lock of hair, which folds in two as said support 8 passes by, which [support] then moves back up along the double lock, and [then] said device 1 is
5 removed.

The loop may consist of any small-diameter metal wire that is non-toxic to humans, such as stainless steel spring, etc., or any semi-rigid wire made of a plastic material. The diameter must be such that it retains the very elongated oval shape of the "loop," but be sufficiently small so that the loop can be readily deformed and
10 manipulated in order to easily enable the operations described above.

To date, the best embodiment of the rod or loop consists of a stainless steel spring wire.

The support 8 for the ornament 9 may consist of any material that is non-toxic to humans, and that is sufficiently flexible to enable the fastening and sliding
15 operations described above; e.g., a sheath made of elastomer, in particular neoprene, silicone, or a sheath made of another food-grade plastic material or the like.

Like the crimp 6 at the end 4 of the loop, this support may be perforated with a coaxial channel 12 or with two channels 12, 12'; it then consists of a sheath, or [it may] be slit open over approximately $\frac{3}{4}$ of its diameter in order to enable pinching.

20 The preferred embodiment is a neoprene sheath, but materials such as silicones and elastomers may also be used.

Most preferably, said silicone, neoprene or elastomer sheath is sufficiently rough in the area of its coaxial channel to be held in place gently on the loop, and then on the lock of hair, without slipping unexpectedly. The choice of another material
25 should also involve a material that is sufficiently rough or "gripping."

One of the very important advantages of the invention is actually to enable individual and accurate positioning of one or more ornaments in selected positions on a lock [of hair].

Said ornaments may be of any type, such as a pearl, a small mass (e.g., made
30 of a plastic material, resin or the like), colored, or transparent, or colorless, or

sparkling, possibly itself bearing sequins, locks of hair and any decorative element easily accessible to those skilled in the art.

Said ornament mass 9 may take on any shape, e.g., imitating various diamond cuts, a circle, square, a half-sphere, a faceted half-sphere, etc.

5 The invention also relates to the method of positioning ornaments 9 in the hair, characterized in that it includes the following steps:

- using

- o a device 1 as described above, comprising a loop 2 consisting of two semi-rigid branches 10, 11 comprising a threading end 3 and another crimped end 4

10 with an overall oblate-shaped crimp, the loop defining a very elongated oval,

- o as well as at least one ornament 7 comprising a slightly rough support 8 such as a neoprene or silicone sheath capable of being threaded, pinched or otherwise arranged on said loop so as to be able to slip or slide thereon, and at least one ornament 9;

15 - said support 8 is threaded onto said loop 2, a lock of hair is passed into said loop, the support 8 holding the ornament 9 is transferred (by sliding it along said loop 2), onto said lock of hair, and [then] said device 1 is removed.

The invention also relates to hair ornaments 7 comprising:

- a slightly rough support 8 such as a sheath made of silicone, or of a plastic

20 material, or a support of this type slit open over approximately $\frac{3}{4}$ of its diameter, and capable of being threaded, pinched or otherwise arranged on said loop, so as to be able to slip or slide thereon,

- at least one ornament element 9 integral with said support, of any shape and material, in particular, imitation diamonds, circular or semi-spherical masses, faceted

25 or not, and possibly bearing decorative elements such as sequins or sparkles or the like.

Said ornament may be replaced by an "active element," or be combined with an "active element," selected from among the group consisting of scented jewels, perfume diffusers, perfume testers, testers for hair colorings, pieces supported by

several sheaths (e.g., cloth fabric), jewels for dogs, diffusers for dogs, diffusers for medicated products for dogs, and jewels for horses' manes.

Said support 8 may be of any shape enabling passage of the loop, and will be selected according to substantially aesthetic criteria, so as to be consistent with the
5 ornament 9.